IN THE CLAIMS:

Claims 1 - 8 (canceled)

9. (Original) A method of producing a silicon ingot, characterized in that the silicon ingot is pulled by the CZ method under conditions satisfying the following (1) and (2):

(1) $1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$

(2) $0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{center} \times G2_{center})^{-0.2}$

Claims 10 - 15 (canceled)

16. (New) A method of producing while reducing crystal defects a silicon ingot, comprising the step of pulling the silicon ingot by the CZ method so that:

(1) $1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$

(2) $0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{center} \times G2_{center})^{-0.2}$

where

$G1_{edge}$ is that temperature gradient (C°/mm) in the axis at the crystal edge in the temperature region from the solid-liquid interface temperature to approximately 1350°C;

G_1 center is the axial direction temperature gradient (C°/mm) at the crystal center from the solid liquid interface temperature to approximately 1350°C; and

G_2Center is the axial direction temperature gradient (C°/mm) at the center of the crystal new 1120°C.

Respectfully submitted,

Gerald T. Shekleton

Gerald T. Shekleton
Registration No. 27,466

Dated: March 19, 2004

WELSH & KATZ, LTD.
120 South Riverside Plaza
22nd Floor
Chicago, Illinois 60606-3913
Telephone: 312/655-1500